

Figs. 65-69. *Anisonema concavum*, n. sp.: all magnified 500 diameters. Fig. 65, a dorsal view, the inrolled margin (*t*) seen through the body. Fig. 66, a ventral view of fig. 65, the base of the gubernaculum (β^2) covered by the inrolled edge (*t*). Fig. 67, a profile view of the right side of the body, showing its concavo-convex character. Fig. 68, an end view to show the lateral extent of the covered way from which the gubernaculum (β^2) and the anterior flagellum (β) spring. Fig. 69, a ventral view of an animal which possesses two extra flagella (β^3). It is probably in the incipient stage of fissigemination.

Figs. 70-74. *Heteromastix proteiformis*, Jas.-Clk. All the figures are magnified 500 diameters. Fig. 70, profile view of the right side of a fully extended animal, the gubernaculum (β^2) trailing beneath. Fig. 71, the same as fig. 70, in a partially contracted state. Fig. 72, an individual seen directly from below, with its anterior end strongly retracted and broadened. Fig. 73, an animal partially contracted and propped up on its tail by its flagella (β, β^2), and exposing its ventral ciliated furrow (*f*) to full view. Fig. 74, an end view of the head, with the group of cilia (*cl*) on the lower side.

Figs. 75, 76. *Pleuronema instabile*, Jas.-Clk. Fig. 75, a dorsal (ventral, homologically speaking) view, 1000 diam. Fig. 76, an end view of the head; the contractile vesicle (*cv*) in the foreground, and the flagellum (β) in the distance; a part of the ventral side is destitute of cilia: 500 diam.

Figs. 77, 78. *Dysteria procefrons*, Jas.-Clk. Fig. 77, a view of the dorsal (homologically the ventral) side, the broader valve (*v*) next the eye, and the narrower three-beaked valve (*v*¹, *bk*) in the extreme distance, 600 diam. Fig. 78, a foreshortened view of the body as it appears when turned up on its right edge; the head next the observer, and the pivot (β^2) in the distance: 600 diam.

XXXIV.—Description of two new Gobiod Fishes from Sarawak. By Dr. A. GÜNTHER, F.R.S., F.Z.S.

[Plate XII.]

THE Marquis J. Doria has sent to the British Museum a collection of Fishes made by him in Sarawak (Borneo). Several of the species are new to the fauna of Borneo*, viz. *Nemachilus fasciatus* (K. & v. H.), *Apocryptes viridis* (H. B.)†, *Exocoetus oligolepis* (Blkr.), *Caranx atropus* (Schn.), *Dussumieria acuta* (C. & V.), *Pristigaster macrognathus* (Blkr.), *Saurida argyrophanes* (Richards.). *Eleotris melanostigma* (Blkr.) is not specifically distinct from *E. butis* (H. B.), a species ranging from the east coast of Africa to Borneo and China. The total number of species known from Borneo

* See Bleeker, "Dertiende Bydrage tot de Kennis der Visch-fauna van Borneo," in Act. Soc. Sc. Indo-Neerl. 1860.

† This is not a *Boleophthalmus*, to which genus it has been referred by all previous authors.

amounts now to about 340, which is evidently only a fraction of the number actually existing in this island.

Two of the species were desiderata for the British Museum Collection, viz. *Synanceia asteroblepa* (Richards.) and *Apo-cryptes borneensis* (Blkr.); and the following appear to be new to science:—

Gobius Doriæ. Pl. XII. fig. A.

D. 6 | $\frac{1}{7}$. A. 8. L. lat. 27.

Head broad, depressed, rather broader than deep; it is naked, as is the nape and the lower part of the thorax; there are only a few scales on the hind part of the gill-cover. Sides of the head with several series of pores. The length of the head is contained thrice in the total length (without caudal), the height of the body thrice and two-thirds. Snout broad, depressed, shorter than the eye, which is two-sevenths of the length of the head. Cleft of the mouth wide, extending beyond the front margin of the eye. Canine teeth none. Interorbital space flat, broad. There are ten longitudinal series of scales between the origins of the second dorsal and anal. Scales not serrated. Fins low and short. Brownish black, encircled by three broad yellowish bands—the first round the nape and opercle, the second corresponding to the space between the two dorsal fins, the third on the caudal peduncle. Caudal fin yellowish, with the base deep black.

I have named this very fine species after its discoverer. Three examples, 15 lines long, are in the collection.

Eleotris dasyrhynchus. Pl. XII. fig. B.

D. 6 | 9. A. 8. L. lat. 29.

Head very broad and depressed, cheeks swollen, the greatest width of the head being equal to its length, without snout. The gill-covers and the upper part of the cheek are scaly, the remainder of the head naked. The præorbital and the supraorbital ridge are beset with rough prominences or spines. The length of the head is contained thrice and one-third in the total length (without caudal), the height of the body four times and three-quarters. Snout very broad and depressed. Eyes exceedingly small, directed upwards, separated by a broad flat space. Teeth small, in a band, those of the outer series being a little larger; palate toothless. Mouth wide, the maxillary reaching behind the orbit. Præoperculum without spine. Scales ctenoid; there are eight longitudinal series between the origins of the second dorsal and anal fins. The posterior part of the second dorsal and anal are slightly elevated; caudal rounded,

of moderate length. Brownish black, each scale with the margin lighter; back with two or three yellowish blotches: the first, at the origin of the spinous dorsal, is sometimes absent; the second at the origin of the soft dorsal, and the third on the back of the caudal peduncle. Dorsal fins coloured as the body underneath; caudal nearly uniform white. Pectoral rays variegated with black.

Three examples, the largest $2\frac{1}{2}$ inches long, are in the collection.

XXXV.—*Notes on the Remains of some Reptiles and Fishes from the Shales of the Northumberland Coal-field.* By ALBANY HANCOCK, F.L.S., and THOMAS ATTHEY*.

THE coal-shales of the Low-Main seam at Newsham and Cramlington, near Newcastle-upon-Tyne, so prolific in fish-remains, have also yielded some very interesting reptilian fossils, the largest and most important of which are the posterior and upper portions of two crania that are undoubtedly Labyrinthodont. These are apparently closely related to *Loxomma Allmanni* described by Prof. Huxley in the Proc. Geol. Soc. vol. xviii. p. 291 (1862), though apparently generically distinct from that form. Two sets of sternal plates have also been found in the same locality, as well as several ribs, a few vertebræ, two of which have the neural arch complete and most of the processes attached. Several premaxillaries and three or four portions of mandibular bones, with the teeth attached, have also occurred. All these most probably belong to the same large Labyrinthodont Amphibian.

Besides the above interesting remains, an almost entire individual of a new species of *Ophiderpeton*, Huxley, has occurred, as well as several other fragmentary reptilian fossils. And what we now propose is to give in the following pages more or less detailed descriptions of all these, and likewise of some fish-remains that have been found in the same locality.

Pteroplax cornuta, nobis.

The two cranial fragments of the reptile designated as above are each composed of the two quadrate supra-occipitals, the two parietals, portions of the elongated frontals, the post-frontals, and the epiotic bones, all of which are firmly united into one great pyriform shield by well-knit serrated sutures, which can be traced with sufficient accuracy. This shield

* Read at a Meeting of the Nat. Hist. Soc. of Newcastle-upon-Tyne and Tyneside Nat. Field Club, March 12, 1868.